

7. (Amended) The hydrogenation catalyst for hydrocarbon oil as claimed in claim 1, wherein the metal of Group 6 of the Periodic Table is molybdenum and the metal of Groups 8 to 10 of the Periodic Table is nickel.

8. (Amended) The hydrogenation catalyst for hydrocarbon oil as claimed in claim 1, which carries a phosphorus compound along with the metal compound of Group 6 and the metal compound of Groups 8 to 10 of the Periodic Table.

9. (Amended) A method of hydrogenation of hydrocarbon oil, in which is used the hydrogenation catalyst of claim 1.

16. (Amended) The method for producing a hydrogenation catalyst as claimed in claim 10, wherein a phosphorus compound is loaded on the refractory inorganic oxide carrier, along with the metal compound of Group 6 and the metal compound of Groups 8 to 10 of the Periodic Table thereto.

17. (Amended) The method for producing a hydrogenation catalyst as claimed in claim 10, wherein the metal of Group 4 of the Periodic Table is titanium or zirconium.

18. (Amended) The method for producing a hydrogenation catalyst as claimed in claim 10, wherein the metal of Group 6 of the Periodic Table is molybdenum or tungsten, and the metal of Groups 8 to 10 of the Periodic Table is cobalt or nickel.

19. (Amended) The method for producing a hydrogenation catalyst as claimed in claim 10, wherein the refractory inorganic oxide carrier is alumina.

20. (Amended) The method for producing a hydrogenation catalyst as claimed in claim 10, wherein the water-soluble organic compound having a boiling point or a decomposition point of not lower than 150°C is at least one selected from diethylene glycol, triethylene glycol, polyethylene glycol and butanediol.

21. (Amended) A hydrogenation catalyst produced in the method of claim 10.

25. (Amended) The metal compound-loading refractory inorganic oxide carrier as claimed in claim 23, wherein the refractory inorganic oxide carrier is  $\gamma$ -alumina.

26. (Amended) The metal compound-loading refractory inorganic oxide carrier as claimed in claim 23, wherein the metal compound is a metal alkoxide.

27. (Amended) The metal compound-loading refractory inorganic oxide carrier as claimed in claim 23, wherein the metal is of Group 4 of the Periodic Table.

29. (Amended) A method for producing the metal compound-loading refractory inorganic oxide carrier of claim 23, which comprises impregnating a refractory inorganic oxide carrier with an aqueous solution that contains a water-soluble organic compound having a boiling point or a decomposition point of not lower than 150°C, then drying it, and thereafter further impregnating with a solution of a metal compound.

30. (Amended) A method for producing the metal compound-loading refractory inorganic oxide carrier of claim 26, which comprises impregnating a refractory inorganic oxide carrier with an aqueous solution that contains a water-soluble organic compound having a boiling point or a decomposition point of not lower than 150°C, then drying it, and thereafter further dipping it in an alcoholic solution of a metal compound, metal alkoxide.

31. (Amended) A hydrogenation catalyst having at least one metal of Group 6 and at least one metal of Groups 8 to 10 of the Periodic Table supported on the metal compound-loading refractory inorganic oxide carrier of claim 23.

32. (Amended) A hydrogenation catalyst having at least one metal of Group 6 and at least one metal of Groups 8 to 10 of the Periodic Table supported on the metal compound-loading refractory inorganic oxide carrier of claim 23, which is heated at a temperature not higher than 300°C.

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33. (Amended) A method of hydro-desulfurization of hydrocarbon oil, in which is used the hydrogenation catalyst of claim 31.

Please add new Claims 34-59 as follows:

34. (New) The hydrogenation catalyst for hydrocarbon oil as claimed in claim 4, wherein the refractory inorganic oxide is alumina.

35. (New) The hydrogenation catalyst for hydrocarbon oil as claimed in claim 3, wherein the amount of titanium in terms of its oxide form falls between 1 and 15 % by weight of the refractory inorganic oxide carrier.

36. (New) The hydrogenation catalyst for hydrocarbon oil as claimed in claim 4, wherein the amount of titanium in terms of its oxide form falls between 1 and 15 % by weight of the refractory inorganic oxide carrier.

37. (New) The hydrogenation catalyst for hydrocarbon oil as claimed in claim 4, wherein the metal of Group 6 of the Periodic Table is molybdenum and the metal of Groups 8 to 10 of the Periodic Table is nickel.

38. (New) The hydrogenation catalyst for hydrocarbon oil as claimed in claim 4, which carries a phosphorus compound along with the metal compound of Group 6 and the metal compound of Groups 8 to 10 of the Periodic Table.

39. (New) A method of hydrogenation of hydrocarbon oil, in which is used the hydrogenation catalyst of claim 4.

40. (New) The method for producing a hydrogenation catalyst as claimed in claim 12, wherein a phosphorus compound is loaded on the refractory inorganic oxide carrier, along with the metal compound of Group 6 and the metal compound of Groups 8 to 10 of the Periodic Table thereto.

41. (New) The method for producing a hydrogenation catalyst as claimed in claim 14, wherein a phosphorus compound is loaded on the refractory inorganic oxide carrier, along with the metal compound of Group 6 and the metal compound of Groups 8 to 10 of the Periodic Table thereto.

42. (New) The method for producing a hydrogenation catalyst as claimed in claim 12, wherein the metal of Group 4 of the Periodic Table is titanium or zirconium.

43. (New) The method for producing a hydrogenation catalyst as claimed in claim 14, wherein the metal of Group 4 of the Periodic Table is titanium or zirconium.

44. (New) The method for producing a hydrogenation catalyst as claimed in claim 12, wherein the metal of Group 6 of the Periodic Table is molybdenum or tungsten, and the metal of Groups 8 to 10 of the Periodic Table is cobalt or nickel.

45. (New) The method for producing a hydrogenation catalyst as claimed in claim 14, wherein the metal of Group 6 of the Periodic Table is molybdenum or tungsten, and the metal of Groups 8 to 10 of the Periodic Table is cobalt or nickel.

46. (New) The method for producing a hydrogenation catalyst as claimed in claim 12, wherein the refractory inorganic oxide carrier is alumina.

47. (New) The method for producing a hydrogenation catalyst as claimed in claim 14, wherein the refractory inorganic oxide carrier is alumina.

48. (New) The method for producing a hydrogenation catalyst as claimed in claim 12, wherein the water-soluble organic compound having a boiling point or a decomposition point of not lower than 150°C is at least one selected from diethylene glycol, triethylene glycol, polyethylene glycol and butanediol.

49. (New) The method for producing a hydrogenation catalyst as claimed in claim 14, wherein the water-soluble organic compound having a boiling point or a decomposition

point of not lower than 150°C is at least one selected from diethylene glycol, triethylene glycol, polyethylene glycol and butanediol.

50. (New) A hydrogenation catalyst produced in the method of claim 12.

51. (New) A hydrogenation catalyst produced in the method of claim 14.

52. (New) The metal compound-loading refractory inorganic oxide carrier as claimed in claim 24, wherein the refractory inorganic oxide carrier is  $\gamma$ -alumina.

53. (New) The metal compound-loading refractory inorganic oxide carrier as claimed in claim 24, wherein the metal compound is a metal alkoxide.

54. (New) The metal compound-loading refractory inorganic oxide carrier as claimed in claim 24, wherein the metal is of Group 4 of the Periodic Table.

55. (New) A method for producing the metal compound-loading refractory inorganic oxide carrier of claim 24, which comprises impregnating a refractory inorganic oxide carrier with an aqueous solution that contains a water-soluble organic compound having a boiling point or a decomposition point of not lower than 150°C, then drying it, and thereafter further impregnating with a solution of a metal compound.

56. (New) A method for producing the metal compound-loading refractory inorganic oxide carrier of claim 24, which comprises impregnating a refractory inorganic oxide carrier with an aqueous solution that contains a water-soluble organic compound having a boiling point or a decomposition point of not lower than 150°C, then drying it, and thereafter further dipping it in an alcoholic solution of a metal compound, metal alkoxide.

57. (New) A hydrogenation catalyst having at least one metal of Group 6 and at least one metal of Groups 8 to 10 of the Periodic Table supported on the metal compound-loading refractory inorganic oxide carrier of claim 24.

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59. (New) A method of hydro-desulfurization of hydrocarbon oil, in which is used the hydrogenation catalyst of claim 32.

**PREFACE**